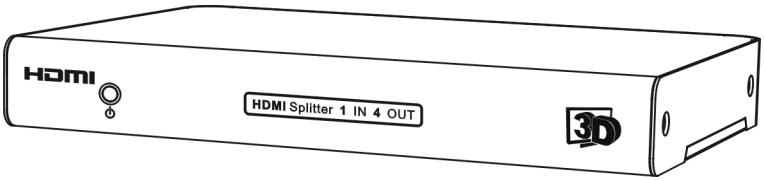
Splitter

1 input 4 output

Model: **33-12510**



INTRODUCTION

Thank you for your purchase of the Stellar Labs Model 33-12510 HDMI Splitter. This splitter is designed to simplify the use of multiple high definition A/V devices in a home theater system.

The 33-12510 allows one HD source device to support up to four HDTV displays, providing each display the same image quality as the source. As this supports HDMI 3D video format, it is compatible with all equipment currently manufactured.

The amplifier and equalizer functions offer solutions for Home Theater, AV installation data center, information distribution, conference room presentation, school and corporate training environment.

FEATURES AND CONTENTS

For the best performance of this splitter box, please read this manual carefully and keep it for further information.

Features:

- HDMI® 3D video format support
- Supports 1080p HDTV
- Pixel Clock Rate: 25 ~ 225 MHz
- Quick reset key for splitter re-initiation
- Dual detection mode selection (A/B Switch)
- Supports HDCP compliant devices
- Compliant with DTS-HD®, Dolby® TrueHD lossless compressed digital audio
- Amplifier and Equalizer functions enable longer HDMI® cable
- Distribute HDMI® signal up to four display devices
- Gold plated connectors
- Rugged, stylish metal housing design

Content of Package

- DC 5V power adaptor
- Splitter main unit
- User's manual

CONNECTION ILLUSTRATION

Quick Start Guide

A. TV Wall / Multi-Room / Sports Bar Application:

1. Set the Splitter in **Detection Mode A**.
2. Blue-ray DVD player set to AUTO video (resolution / color deep) and audio detection.
3. Connect all HDTVs to the Splitter; please check Figure 1 for your reference.
4. Connect the power adaptor to the Splitter and turn on the power switcher.

※ If the Blue-ray DVD doesn't support auto detection, please:

(1) Set the output signal of the Blue-ray DVD player to match with the lower standard HDTV to ensure all HDTVs can display same images. In the case of figure 1, it will be HDTV 2 (720p/8-bit).

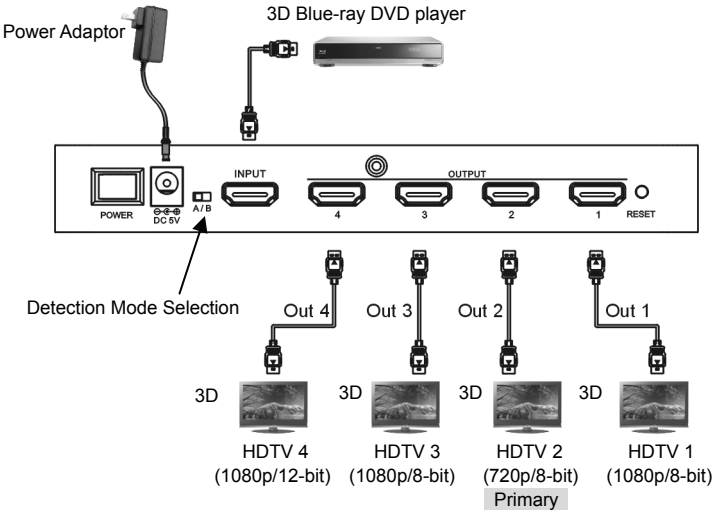
(2) **OR** set the Splitter in **Detection Mode B**, and set the output signal of the Blue-ray DVD player to 720p/8-bit. Connect the HDTV 2 (720p/8-bit) to port 1.

※ 3D Application:

(1) Please make sure your Blue-ray player and all the HDTVs can support the same 3D format.

(2) Under Mode A, if there is any of HDTVs cannot support either 3D application or the same 3D format, all of the HDTVs will be displayed in 2D. If the supporting 3D format of the Blue-ray player cannot be compliant with one or some of the 3D HDTVs, the incompatible 3D TVs would not be able to correctly show the 3D image.

Figure 1



B. Home Theater Application:

1. Set the Splitter in **Detection Mode B**.
2. Blue-ray DVD player set to AUTO video (resolution / color deep) and audio detection.
3. Connect the Home Theater Receiver, Projector, and HDTV to the Splitter; please check Figure 2 or Figure 3 for reference.
4. Connect the power adaptor to the Splitter and turn on the power switcher.
   ※ Blue-ray DVDs disc may support different audio format (PCM; Bit Stream: Dolby, DTS…etc.), please set the Blue-ray DVD player to the correct audio format setting or set it to auto detection. Please follow the user's manual of your Blue-ray DVD player to change the output setting.
   ※ 3D Application:
   (1) Please be sure your Blue-ray player and all the HDTVs can support the same 3D video format.
   (2) Under Mode B, the device connected to output port 1 (TV, projector, amplifier, etc.) will be the primary device for output standard.
   - If the device connected to output port 1 equipped with 3D function, the Blue-ray player also supports 3D, then 3D format will be selected as output format.
   - If the source connected to output port 1 is a 2D device, the 2D format will be used for all the outputs.
   (3) When 3D HDTV or projector is used with a Home Theater Receiver, the Home Theater Receiver needs to support 3D format as well, otherwise the Home Theater Receiver would have no audio output. In this case, please change the play mode from 3D to 2D.

Figure 2

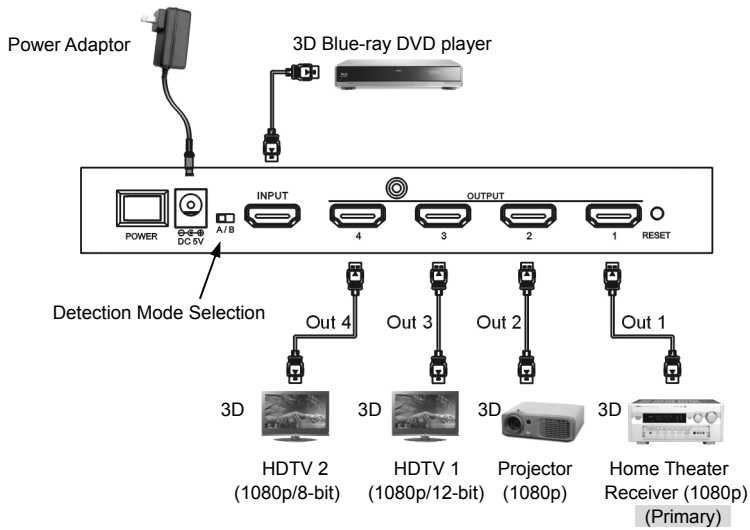
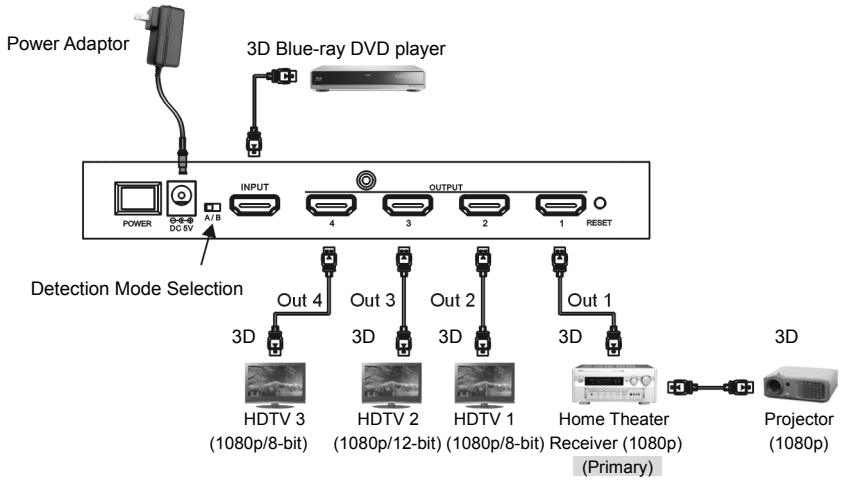


Figure 3



The connection illustrations are for reference only.

DETECTION MODE SELECTION

* HDMI® connections require the EDID and HDCP information of source and sink devices for successful communications.
* Please check if the source devices (ex. Blue-ray DVD Player) support auto detection and auto adjustment of resolution, color deep and audio format.
* The Splitter is designed with 2 detection modes. Users can choose an appropriate detection mode before starting to connect and operate the Splitter.
* The mode selection switch is located at the rear panel of the Splitter box.
* The original mode setting is mode A.
* Please make sure all of the source and display devices (TV, Blue-ray player, projector) support the same 3D format while choosing mode A for play.

Mode A: (Highest Common Factor Mode)
Auto Detection, Lower Standard First

It is recommended to use Mode A for TV wall application, sports bar application, or other application when different standard (resolution, color deep) HDTVs are connected together.

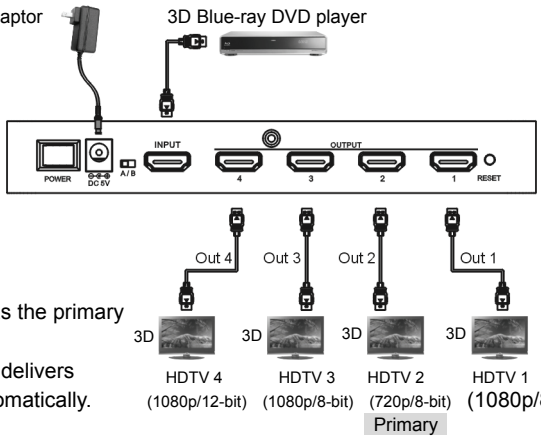
- **Source device supports Auto Detection and Auto Adjustment.** (Please make sure the auto functions are active.)

  The Splitter will compare the EDID information of each sink device (HDTV). A lower standard sink device will be set as the primary sink device to communicate with the source device. For example, 4 HDTVs are connected to the Splitter with a Blue-ray DVD player, which supports auto resolution / color deep detection and auto output signal adjustment. One of the 4 HDTVs supports resolution in 720p and color deep in 8-bit, two support resolution in 1080p and color deep in 8-bit, another HDTV supports resolution in 1080p and color deep in 12-bit. The HDTV that has lower resolution and color deep will be set as the primary HDTV. And the Blue-ray DVD player will automatically deliver 720p/8-bit signal to all connected HDTVs. (Figure 4) If all the connected devices support 3D format, the system will automatically take 3D play mode as a prior option.

  When a new HDTV is connected to the system or the connection is changed, the Splitter will detect the EDID of the newly connected HDTV.

If the newly connected HDTV supports lower standard in resolution or color deep, the source device will adjust the output signal to match the HDTV. The picture on every HDTV will disappear for a few seconds. If the new HDTV supports higher standard, the picture quality on every HDTV will not change.

Figure 4



- HDTV 2 is selected as the primary sink device.
- Blue-ray DVD player delivers 720p/8-bit signal automatically.

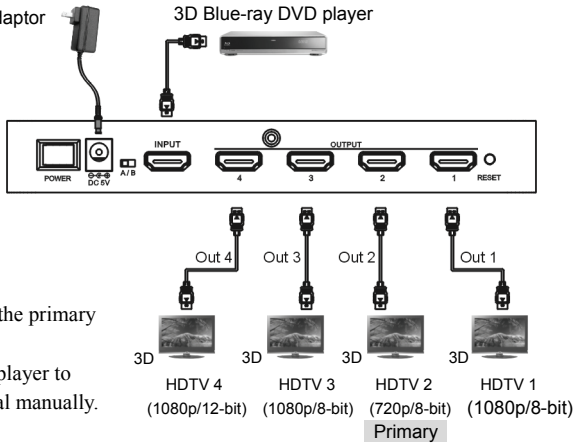
■ **Source device DOES NOT support Auto Detection and Auto Adjustment.**

The source device will send the signal as the setting of source device. Please set the output resolution of the source device first, and make sure the resolution can be displayed on all connected display devices.

For example, 4 HDTVs are connected to the Splitter which is connected with a Blue-ray DVD player which DOES NOT supports HDTV resolution / color deep auto detection and auto output signal adjustment; one of the HDTV supports resolution in 720p and color deep in 8-bit, two of the HDTVs support resolution in 1080p and color deep in 8-bit, another HDTVs supports resolution in 1080p and color deep in 12-bit. (Figure 5)

In order to have all HDTVs working, please set the output resolution to 720p and set the color deep to 8-bit; otherwise some HDTVs will not show picture. Also, if the 3D Blue-ray player was set 3D mode for play at first, the HDTV or projector without supporting 3D play function would not be able to show 3D content appropriately.

Figure 5



- HDTV 2 is selected as the primary sink device.
- Set the Blue-ray DVD player to deliver 720p/8-bit signal manually.

Mode B: (Priority Mode)

Output Port Detection Sequence, First Detect First Out

- The detection priority is from port 1 to port 4.
- It is recommended to connect lower standard HDTV to port 1 to make sure all connected HDTV can display same image.
- Users can assign one sink device (HDTV, Home Theater Receiver or Projector) as the primary sink device by connecting it to port 1.

■ **Source device supports Auto Detection and Auto Adjustment.** (Please make sure the auto functions are active.)

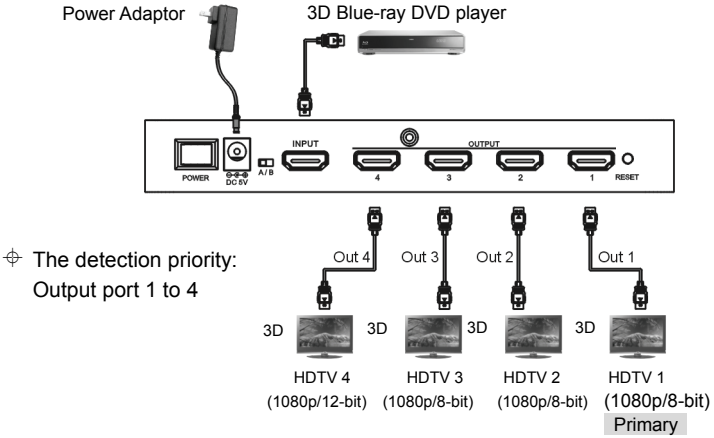
Sink device that connects to port 1 will be the primary sink device. The source device will set the output signal based on the primary sink device.

■ **Source device DOES NOT support Auto Detection and Auto Adjustment.**

Please set the output resolution and color deep of the source device first, and make sure the resolution and color deep can be displayed on all connected display devices.

For example, if you set the output resolution and color deep of the Blue-ray DVD player to 1080p and 8-bit, please make sure all the HDTVs can display 1080p/8-bit (resolution/color deep). If any connected display device can not support 1080p/8-bit (resolution/color), this HDTV will not show pictures. (Figure 6)

Figure 6



⌖ The detection priority: Output port 1 to 4

Splitter			Source Device	
Detection Mode	Mode Action	Suggested Application	Auto Detection & Auto Adjustment	
			Supported	Not Supported
A (Highest Common Factor Mode)	Auto detection, Lower Standard First	TV wall application, sports bar application, or other application that different standard (Resolution, Color Deep) HDTVs are connected together.	The Splitter will compare the EDID information of each sink device (HDTV). A lower standard sink device will be set as the primary sink device to communicate with the source device.	The output resolution and color deep of the source device need to be set first.
B (Priority Mode)	Port 1~4 detection sequence, First Detect First Out	Home Theater Application, or user assigns a primary sink device by connect it to port 1.	Detection Sequence starts from port 1. When connect a sink device to port 1, the device will be detected. The source device will set the output signal based on port 1 (primary sink device).	The output resolution and color deep of the source device need to be set first.

- HDMI 3D video format

  Frame packing: 1920x1080p@23.98/24Hz
  1280x720p@59.94/60Hz
  1280x720p@50Hz

  Side-by-Side (Half): 1920x1080i@59.94/60Hz
  1920x1080i@50Hz

  Top-and-Bottom: 1920x1080p@23.98/24Hz
  1280x720p@59.94/60Hz
  1280x720p@50Hz

CONNECTION AND OPERATION

Connect the Splitter to your devices

1. Connect the HDMI® cable from the HD source to the input port of Splitter.
2. Connect the HDMI® cables from your displays (monitor or projector) to the outputs of the Splitter.
3. Select one of the detection modes. Please refer to DETECTION MODE SELECTION above.
4. Plug the 5VDC power supply into the Splitter and turn on the power switch.
5. When connections are completed, the HDTV signal will be distributed to each HDTV display.
6. For the best performance, you can press the RESET key once to re-initiate the splitter, if the HDMI® connection is changed. It can make sure the Splitter is working well in HDCP between HD player and display devices.

TROUBLESHOOTING

1. When there is no picture presented, please:
   - Make sure the direct connection from the source device to the display device without the Splitter is working.
   - Check all the connection is correct and all connectors are connected well.
   - Check the quality of connected cable, and make sure the cable does not damage.
   - Change the connection sequence of display devices.
   - Make sure the output resolution setting of source device can be displayed on all connected display devices.

- Reset the Splitter.

2. How to make sure your input and output devices are suitable with the Splitter?
   - Whether all devices are HDCP compliant?
   - Whether all HDMI® cables stay in good quality as well as connectors?
   - Make sure all HD displays support the same resolution (720p, 1080i, or 1080p).
3. Some of the connected HDTVs show “mode not support”, some HDTVs are working well.
   - Make sure all HD displays support the same resolution (720p, 1080i, or 1080p) and color deep (8-bit, 10-bit, and 12-bit).
   - The HDTVs which show “mode not support” may support low color deep.
   - Try to change the detection mode to Mode A,
   - Or set to Mode B and then connect one of the non-working HDTV to output port 1.
4. When there is only picture displayed and without sound:
   - Check all the connection is correct and all connectors connect well.
   - Check if you connect any DVI interface display device to the splitter, the splitter may use the EDID information of the DVI interface display device as communication standard. DVI supports only video transmission. Please change the connecting sequence, and reset the Splitter. Make sure the connection is in the HDMI® standard.
   - Check your cable to see if it supports video transmission only or it is damaged.
   - HDCP may not match very well at first connection. Please reset your Splitter by press the reset key.
   - Do you connect any recorder that does not support HDCP to the output port of Splitter? HDCP may lock up audio part.
5. My new HDTV and Blue-ray DVD player can support up to 1080p/12-bit, but when I set the Blue-ray DVD player to auto detection, it always deliver 1080p/8-bit video signal.
   - Disable the auto detection function of the Blue-ray DVD player, and set the output resolution and color deep to 1080p/12-bit. (If other connected sink devices can not support 1080p/12-bit video signal, the sink devices will not show image.)
6. Snowing noise or image interruption occur when use 1080p/12-bit output setting.
   - Make sure the HDMI® cable is capable of transmitting 1080p/12-bit video signal. A High Speed Rated HDMI® cable is recommended.
7. When resolution could not show in 1080p?
   - Make sure your sources (HD Player) and displays are fully supporting 1080p.
8. A HDTV and Home Theater Receiver are connected to the Splitter, but the receiver delivers stereo audio to the audio amplifier instead of HD audio (Dolby TrueHD, DTS HD).
   - The primary sink device may set to the HDTV which may only support stereo audio. Please set the detection to Mode B. Connect the Home Theater Receiver to port 1, and connect the HDTV to port 2 or other ports. The Home Theater Receiver will be set as the primary sink device.
9. When 3D content could not be shown on your display.
   - Please make sure your source and displays are 3D supported devices and also support the same 3D format.
   - Please check the play mode of Blue-ray player has been set 3D mode or AUTO mode for video output.
   - Please make sure the video content is 3D content.
10. If the presented picture is not a proper 3D image, please check whether the 3D format of 3D Blue-ray player and TV (projector) are correct setting.
11. If the presented picture is symmetric, which showed with up and down or right and left symmetric image, please check whether the TV or projector supports 3D display function and make sure the function is enabled. If the TV or projector does not support 3D video format, please turn off the 3D play mode of 3D Blue-ray player.

NOTICE

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- 33-12510 incorporates HDMI® technology.
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- Dolby is a registered trademark of Dolby Laboratories.
- DTS is a registered trademark & the DTS logos and Symbol are trademarks of DTS, Inc.

WARRANTY

This Stellar Labs device is warranted, by MCM Electronics against defects for a period of 365 days from the date of purchase. This warranty includes manufacture defects and failure due to normal use and operation. Failure due to misuse, excessive wear or damage, improper installation or other external factors is not covered under this warranty. MCM Electronics is not responsible for any consequential on inconsequential damage to any other unit or component incorporated with this device. There are no other warranties, express or implied, which extend beyond this unit, and there are no warranties of fitness for any particular purpose. The warranty does not cover consequential damage due to defective or improper use of products.

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